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# Dear Colleagues,

I am happy to present you this newsletter full of reports on our efforts on research and development in the last year within the GRC. The Gutenberg Research College exists for 10 years and last year's annual celebration was a special highlight. We are delighted to see a continuous stream of excellent fellowship proposals from different departments of JGU. Thus, last year, we were able to welcome a number of new fellows to the GRC who will enrich our university with many scientific and artistic ideas. Furthermore, the executive committee of the GRC supported the university authorities and various initiatives for collaborative research, above all the groups who took part in Germany's Excellence Strategy program and in the Research Initiative of Rhineland-Palatinate.

There are two reasons why I am happy the Rhineland-Palatinate continues research initiative at least until 2018. Firstly. the GRC itself will be funded in the course of the research initiative and thereby receives half of its budget. Secondly, the initiative allows the research centers and research units to continue their successful work. Researchers from different disciplines use this opportunity to work together and cross the barriers of their own fields of research. Besides the funding of individual research projects, these collaborative efforts have led to the establishment of considerable research networks. Thev contributed essentially to the profile formation of JGU and the national and international awareness of the university. As director of the GRC and passionate researcher, I hope the state government will further support top-level research in Rhineland-Palatine in the future. This year, we are looking forward to the

This year, we are looking forward to the decisions about the funding of the Cluster of Excellence (PRISMA+) as part of Germany's



Excellence Strategy program. Members of the cluster have already presented their research questions as well as their achievements to the GRC executive committee. Once again, they were able to convince us of the importance of fundamental physics research and topics like the search for new particles and forces as well as the characteristics of dark matter (see more on page 4).

Furthermore, the members of the GRC executive committee support new initiatives for collaborative research with their expert knowledge. In close coordination with the Vice President for Research and Early Career Academics and the staff unit Research and Technology Transfer, GRC fellows as well as members of the executive committee and other experienced researchers advise colleagues with the preparation of interdisciplinary projects

and proposals. I am happy to get in touch with you and talk about your promising and extraordinary research ideas.

Moures Hielre

Yours sincerely

Thomas Hieke

#### **Excellence Strategy**

The GRC executive committee counseled the university leadership as well as researchers with their applications for the German Excellence Strategy program. After different groups had presented their ideas to the executive committee in the spring of 2016, some members of the committee continued to consult the applicants during the following process of the preparation of their project drafts. Even though most of the drafts have not led to full proposals in the end, the work was not futile. Many interesting research ideas were developed and promising co-operations were started and will continue to be pursued in the future. In November 2017. the members of the Excellence Cluster PRISMA+ once again presented the current state of their proposal to the committee and received personal and written comments to their draft and presentation. The GRC will also support the preparation of the evaluation colloquium.

### Precision Physics, Fundamental Interactions and the Structure of Matter (PRISMA+)

Since 2012, the cluster of excellence "Precision Physics, Fundamental Interactions the Structure of Matter" (PRISMA) brings together renowned research groups astrophysics, particle, hadron and nuclear physics as well as in precision laser spectroscopy and in the physics of ultracold neutrons. With the follow-up application PRISMA+, the research of the most exciting and urgent problems of physics such as the characteristics of dark matter and the existence of new particles and fundamental forces - will be continued and expanded.





Prof. Claus Arnold
Department of Medieval and
Modern Church History, Faculty of
Catholic Theology, JGU

Since 2014, Claus Arnold has been professor for medieval and modern church history

at Johannes Gutenberg University. He is an expert on church history of the late nineteenth and the twentieth century and especially on the conflict between modernism and antimodernism within Roman Catholicism. As a GRC fellow, he will continue his research on the linkage between theological antimodernism and political authoritarianism. He will put a special focus on the way Pope Pius X. and Catholic conservatives dealt with Alfred Loisy and his modernist interpretation of the Bible in the first decades of the twentieth century.



Prof. Peter Baumann Institute of Developmental Biology and Neurobiology, JGU; Institute of Molecular Biology Mainz (IMB)

The cell biologist and chromosome researcher Peter

Baumann has become Alexander von Humboldt-Professor and GRC fellow in Mainz. As professor of molecular biology at Johannes Gutenberg University and as adjunct director at the Institute of Molecular Biology, he will continue his research on the architecture and dynamics of chromosome ends and the inheritance of genetic information. His prior appointments were with the Howard Hughes Medical Institute, the Stowers Institute for Medical Research and Kansas University Medical Center, where he made fundamental contributions in the fields of aging, cancer and evolutionary biology. His appointment to the faculty of biology contributes to the re-orientation of research in the life sciences in Mainz and will strengthen collaboration between biological and medical research.



**Prof. Ulrich Breuer**German Department, JGU

Since 2006, Ulrich Breuer has been professor of Modern German Literature at JGU. His research focuses on German Classicism and

Romanticism, but also on the literature from the 1970s. He is widely known for his research on Friedrich Schlegel. Moreover, he has been publishing regularly on more general topics such as poetological concepts and aesthetic theory, autobiographic writing, melancholy, and the theory of text and paratext. As a GRC fellow, he will finish his research on awkwardness in German literature.



**Prof. Dieter Daniels**Academy of Visual Arts (HGB),
Leibzig

Since the beginning of his career, Dieter Daniels has been at the forefront of media theory. In 1984,

he founded the Videonale Bonn, the first international video festival in Germany. Later, he curated international exhibitions of video art in Switzerland, Germany and Japan, and he directed the video collection at the ZKM Center for Art and Media in Karlsruhe, before he was appointed professor for art history and media theory at HGB Leipzig, where he has been teaching since 1993.

His writings cover a broad selection of topics including video, Fluxus, experimental music, netart, John Cage and silence, as well as the history of technology and invention. In particular, his work on video and other audiovisual media are mandatory references for any student in the field.



Prof. Edward A. Lemke
Institute of Molecular Physiology,
JGU; Institute of Molecular Biology
Mainz (IMB)

After several years as group leader of an Emmy Noether and ERC consolidator

research group at the European Molecular Biology Laboratory (EMBL), the biophysical chemist Edward A. Lemke has taken up a professorship for synthetic biophysics at Johannes Gutenberg University. He has also become adjunct director at the Institute of Molecular Biology (IMB) at Mainz. Combining new research methods and expertise in chemistry, biophysics and cell biology, he

has established himself as one of the most innovative researchers in the field of intrinsically disordered proteins. He is speaker of the newly established DFG Priority Programme on molecular mechanisms of phase separation and will continue his research on the "dark proteome" with his colleagues in Mainz.



**Prof. Elisabeth Oy-Marra**Department of Art History and
Musicology, JGU

Elisabeth Oy-Marra has been professor for art history of the early modern period at JGU since 2004. Her

numerous research projects and publications on the arts and art theory in the early modern period, especially in Italy, have been widely received, and she has enriched her field of research by adding both cultural theory and methodical innovations to art history. In recent projects, she has traced the origins of academic art history in a more general history of science and she will continue this line of research in order to finish her new monograph "Techniken der Autopsie. Nachzeichnung, Kupferstich und Beschreibung und ihre Rolle für die Formation einer Wissenschaft der Kunst im Rom des späten 17. Jahrhunderts".



**Prof. Christine Walde**Department of Ancient Studies, JGU

Christine Walde has been professor of Classical Philology at JGU since 2005. She has published on Ovid, Seneca, Vergil, and other

Roman authors, and she is best known as expert on dreams and dream interpretation in Antiquity and on Lucan's Civil war. Throughout her career, Walde has offered a unique approach to classical texts by integrating insights from cultural studies and especially from psychoanalysis and psychology. As a GRC fellow, she will build upon modern trauma research to complete her studies on Lucan's epic Bellum Civile and its reception.

#### AWARDS AND RESEARCH PROJECTS



Hamburg Science Award 2017 from left to right: Prof. Feng, Akademiepräsident E. Kreuzer, Prof. Müllen

The Academy of Sciences and Humanities in Hamburg awarded GRC Fellow KLAUS MÜLLEN with the Hamburg Science Award (Hamburger Wissenschaftspreis) 2017. With this award, the academy honors his pioneering work in the field of graphenes, which plays an important role in the development of batteries, supercapacitors as well as flexible electronic components. Furthermore, Klaus Müllen was elected full member of the section of chemical sciences at the Academia Europaea.

The International Academy of Education (IAE) appointed GRC fellow OLGA ZLATKIN-TROITSCHANSKAIA as fellow. She received this honor due to her outstanding research in the field of international competence research in the higher education sector.

GRC fellow SILVIA HANSEN-SCHIRRA was elected vice president of the International Association for Translation and Intercultural Studies (IATIS). IATIS promotes the exchange of knowledge, resources and expertise between scientists.

The DFG will continue to financially support the Research Training Group "Early Concepts of Man and Nature" for another five years. The college, which is led by the GYR director Tanja Pommerening, involves among others the Egyptologist URSULA VERHOEVEN-VAN ELSBERGEN, who was GRC fellow from 2010 to 2015, and DORIS PRECHEL, professor for Ancient Near Eastern Philology and member of the GRC executive committee.

The director of the Institute of Translational Immunology and former GRC fellow DETLEF SCHUPPAN leads (together with Jörn Schattenberg) a new research initiative named "LIFT-off" (Lifestyle Intervention to prevent and improve hepatic fibrosis in nonalcoholic fatty liver disease). The project is supported by the Rhine-Main Universities (RMU) and serves as a basis for larger research initiatives. Furthermore, Schuppan participates in the international research initiative "Liver Investigation: Testing Marker Utility in Steatohepatitis" (LITMUS). This project is funded by the Innovative Medicines Initiative (IMI) and is developing new diagnostic biomarkers, with which the non-alcoholic fattv liver as well as the risk of liver inflammation and the development of cirrhosis can be determined more precisely than before.

#### ACADEMIC ADVISORY COUNCIL





A new term of office of the GRC Academic Advisory Council has started in 2017.

The members of the Council regularly receive short overviews of the activities of the GRC and discuss them with the director of the GRC, the university authorities and some members of the executive committee. With this critical view from the outside, new perspectives concerning the work of the GRC will be uncovered. The first meeting took place in November 2017. In addition to discussing the day-to-day work of the GRC, the Council members encouraged the nomination of aspiring young researchers for GRC fellowships.

CURRENTLY, THE FOLLOWING TOP-LEVEL
RESEARCHERS AND RESEARCH MANAGERS FROM
OTHER UNIVERSITIES OR RESEARCH INSTITUTES
ARE MEMBERS OF THE COUNCIL:

#### PROF. BERND BUKAU

Professor at the Center for Molecular Biology at Heidelberg University (ZMBH)

#### PROF. CLAUDIA FELSER

Director at the Max Planck Institute for Chemical Physics of Solids, Dresden

#### PROF. BETTINA HEINTZ

Professor at the Department of Sociology, University of Lucerne

#### PROF. KATHARINA HOLZINGER

Professor at the Department of Politics and Public Administration at Konstanz University

#### DR. WILHELM KRULL

Secretary General of the Volkswagen Foundation

#### PROF. MARTIN SABROW

Director of the Centre for Contemporary History (ZZF), Potsdam



In May 2017, the decennial anniversary of the GRC was celebrated at the Mainz School of Music. President Georg Krausch bestowed the Gutenberg Research Award 2017 upon the sociologist KARIN KNORR CETINA for her outstanding scientific achievements in the last decades. The professor of Anthropology and Sociology at the University of Chicago gained international acclaim in the 1980s with her laboratory studies, in which she used ethnographic and anthropological methods to analyze the scientific practices within a laboratory in order to understand how natural scientists produce facts and knowledge in their everyday work. With this and other empirical studies of scientific practice, she inspired generations of students and their studies of the social construction of scientific knowledge. In later decades, she also pioneered research on

another highly influential form of knowledge and analyzed how financial markets create economic knowledge. During her lecture with the title "Takeover by science – or how financial markets got speed" at the GRC celebration, she was able to bring together her two research fields.

In the course of the celebration, the GRC welcomed seven new fellows from different academic and artistic disciplines: The media theorist DIETER DANIELS (Academy of Visual Arts Leipzig), the volcanologist DONALD DINGWELL (Ludwig Maximilians University Munich), the theoretical physicist VICTOR FLAMBAUM (University of New South Wales in Sydney), the sound artist PETER KIEFER (JGU) and the neuroimmunologist JONATHAN KIPNIS (University of Virginia) were officially introduced as GRC fellows. Furthermore, the



German philologist ULRICH BREUER (JGU) and the classical philologist CHRISTINE WALDE (JGU) were the first GRC fellows to be supported in the new program "Zielgerade". With the help of the GRC support, they intend to finish a long-lasting research project and publish an eminent book in their field of expertise.

Guests of the celebration had the pleasure to attend a special musical highlight. CLAUDIA EDER, GRC fellow from 2009 to 2014 and founder of Barock Vocal – Kolleg für Alte Musik, was able to win DAME EMMA KIRKBY from Cambridge over to perform at the event. Kirkby and other musicians delighted the guests with Te Deum and Jubilate Deo for St Cecilia's Day by Henry Purcell.



## Round Table with the Gutenberg Academy for Young Researchers

In July 2017, members of the GRC and the Gutenberg Academy for Young Researchers debated the "Assessment of academic publications". The sociologist STEFAN HIRSCHAUER, member of the GRC executive committee, as well as the nuclear physicist HARTMUT WITTIG, member of the Gutenberg Academy, introduced into the topic by showing very different perspectives on the review processes and the function of reviews in the academic system. Thus, they stimulated a lively debate among lecturers and visitors.

#### GRC "Gewölbegespräch"

In November 2017, ULRICH BREUER presented his current research topic "Awkwardness in Literature" and CHRISTINE WALDE initiated a lively discussion after her lecture on "100 Years of Civil War. Lucan's epic Post-memory". The event in January 2018 focused on arts and artistic research. DIETER DANIELS introduced his idea of "Transdisciplinary Video Theory" and PETER KIEFER illustrated diverse possibilities of artistic and scientific examinations of sound in his talk "Inventions between Sound Art and Sound Research".

### $I \cdot M \cdot P \cdot R \cdot I \cdot N \cdot T$

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Translation: Dominik Bohl,

Madeleine Böckers,

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DESIGN: Inka Meyer, www.designee.de,

PHOTOGRAPHY:

AdWHH/&Engel & Gielen (Müllen),

Simon Büttner (Research Award), Daniel Groß (Walde),

Thomas Hartmann (Lemke), Kristi Jensen (Baumann), Peter Pulkowski

(Arnold), Angelika Stehle (Oy-Marra), Margot Zündorf-Breuer (Breuer)

March 2018

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